TRUMPETER SWANS IN ALASKA Peter E. K. Shepherd Alaska Department of Fish and Game, College

Once relegated to the endangered species list, trumpeter swans are now known to exist in substantial numbers as four distinct breeding populations in Alaska. The distribution of these populations is as follows: (1) the Copper River Delta, (2) the Kenai Peninsula-Cook Inlet, (3) the Nelchina Basin, and (4) the Tanana River Valley. The latest aerial census figures of trumpeter numbers in Alaska exceed 1000 birds, or more than the current North American continental figure.

Nesting studies in 1957, 1958, and 1959 revealed that although the trumpeter lays an average of 5.0 eggs, less than 55 per cent of these eggs are hatched. Moreover, beyond an initial loss of 15 to 30 per cent of the cygnets hatched there appears to be little significant mortality. These data are indicative of a low mortality rate, suggesting that factors other than a low recruitment and survival are limiting trumpeter swan densities.

Ecological studies of the known trumpeter populations suggest that aside from certain habitat requirements, there are innate behavior patterns, including territoriality and tradition-bound affinities to natal areas, which may be important population stabilizing mechanisms. These features are especially manifest in areas where trumpeter swans are found in isolated breeding populations which have or will soon reach the habitat capacity. However, these tentative findings need further study through banding programs and continued surveilance of the existing breeding populations before the effects of the indicated factors are thoroughly understood.

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